

The Newsletter of RSG

SIREN

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Welcome

Welcome to the first Newsletter of RSG. The Research Study Group has been formed specifically to study, research, document, preserve and network on Britain's Cold War Defences. It is a non-political organisation, and aims to present an objective view of the UK's infrastructure and plans used in the period 1945 - 1990, for National Defence.

This remit is deliberately broad, to encompass the huge scope of this subject - Possible examples range from the Thor Missile Pads of Eastern England to the *Protect and Survive* films of the 70's, and the Rotor Bunker Network to the Civil Defence Corps. We hope to cover all these areas plus many more, with something to interest all our members.

We will not infringe knowingly on any subject matter covered by the Official Secrets Act, nor will we become involved in any wild, conspiracy type theories.

RSG was initially formed from a lecture given at the Sub Brit meeting in Oct 1995. At the committee meeting in Jan 1996, it was decided that RSG would be parented by Sub Brit up to the next AGM. If there was still enough interest in the group shown at the AGM, then it would form as a "Stand alone" group, and charge a nominal fee from its members.

This approach was chosen for several reasons. Firstly, the existing Sub Brit third party insurance would cover any RSG activities. Secondly, it would act as a useful catchment for Sub Brit membership. Finally, it was thought that it was too risky to form a group from scratch.

It was also agreed to produce *Siren*, and send it out with the next copy of the Sub Brit *Secretary's Newsletter*, to all members, to gauge interest. RSG is not the exclusive preserve of existing Sub Brit members, and it is very much hoped that many non-members will join. It is hoped to produce at least 2 copies of *Siren*, before the AGM.

I always welcome feedback. Please feel free to contact me and let me know YOUR ideas and thoughts. I am also

grateful for any information, articles and news for future copies of *Siren*.

Regards

Tex Bennett
23 Halstead Road
Earls Colne
COLCHESTER
Essex
CO6 2NG

(01787) 224729 (Answer phone)

Kelvedon Hatch

The Parish Family have now opened Kelvedon Hatch R4 bunker to the public. It is open every day 1000-1700, with tours on the hour. Tours cost - Adults £5, Children £3, and Families £12. 'Phone (01277) 364883 to book.

This is an excellent example of an R4 Rotor Bunker, built in the early 1950's as a Sector Operations Centre for the Metropolitan sector of Fighter Command. It later became a SOC for the UKWMO, and starred in its own film! - *The Hole in the Ground*. It is worth a visit simply to see what a huge undertaking it was.

STOP PRESS - At the time of writing this article, the Bunker was due to shut, as the temporary planning permission had expired. Please 'phone the site for more up to date information, before you visit.

Imperial War Museum

The IWM is opening an permanent Cold War Exhibit in June. It should be fascinating, with examples of Warsaw Pact Occupation money for invading troops to spend in the UK, and Russian - English phrase books for Soviet Paratroops. It is intended that wherever the visitor looks, they will always see an image of a Mushroom Cloud. It promises to be an interesting and thought provoking exhibition.

Film review - *Atomic Cafe*

Although first released in 1982, this film still retains its original impact, especially when viewed from today's post-Cold War perspective. It consists of nearly 90 minutes of official US propaganda and training footage from 1945 to about 1968, set to a period soundtrack. By clever compilation and editing, it tells its own story. Highlights include: US soldiers watching a nuclear test, and then climbing out of their protective trenches to advance into the mushroom cloud; Bert the Turtle telling kids to "Duck and Cover". Available

from Connoisseur Video priced £17.
Credit card orders 0171-9578960.

WB

Bunkerwatch

Nuclear War Bunker to be torn down: That's the Sub Head from the Willesden and Brent Chronicle. It refers to a story about the redevelopment of a bunker in Station Road at Willesden Junction Station.

Railtrack Properties, which owns the steel reinforced bunker with 10 ft walls insist it was used as a control room for trains in the Second World War, but Harlesden City Challenge (doing the redevelopment) claim the structure was built in the 1950s as part of the Civil Defence infrastructure for "the good and the great" of the borough (such as the Mayor and Leader) in the event of Nuclear War. the bunker currently used for paint storage by Railtrack, is to be destroyed to improve the turning circle for buses as part of the modernisation of the station.

Since the publication of this article, Malcolm Tadd and Nick Catford have been granted access to the bunker to carry out an external survey. Lets hope a full record can be made before the bunker is lost. Many thanks to the Sub Brit members who passed this tip on. If you have any local knowledge of Cold War structures, pass it on to RSG.

Civil Defence Down Under

A friend of mine who works in the Australian Film Commission in Sydney has sent some fascinating information regarding Civil Defence in Australia.

According to recently de-classified documents, in 1965 the Australian Federal Government were worried primarily about the threat from the H-bomb equipped Chinese. They felt that they would not be directly involved in a possible Northern hemisphere USA/USSR Nuclear Exchange. Several pamphlets were prepared describing the general threat and basic precautions that could be taken. These were prepared by the Commonwealth Directorate of Civil Defence. The main pamphlet was entitled *Survival from Nuclear Warfare*. This used many illustrations from the UK publication *Advising the Householder on protection from Nuclear Attack*. The main thread of the pamphlets was that the threat of attack was remote, but possible.

However, due to the unique situation of Australia, with its vast un-populated areas, evacuation of the Coastal Cities - the main target areas - was viable, and the population would be evacuated during the period of tension before war. To this end, a survey was carried out in all Australian states, of buildings that could be used for fallout protection. The Australian Government initially proposed to limit this survey to Northern Australia (judged to be closer to the Chinese Threat), but it was felt that the inhabitants of Sydney and Melbourne would not take kindly to the knowledge

they had lesser priority than Northern Australia!

Also at this time a protected Civil Defence radio Transmitter was built just outside Sydney, on the compound of Emu Plains Prison. It was built to broadcast pre-attack attack warnings, and post attack fallout messages. The programme feed came from an undisclosed site, via a specially laid Postmaster Generals' cable. The transmitter was housed with a generator in a fallout proof brick and concrete bunker

RSG - On Line!

For those of you who surf the information super highway, you can find the RSG Web site at:-

<http://www.demon.co.uk/brit/rsg.html>

Many thanks to Richard Lamont for constructing and maintaining it.

Rotor

The UK radar system was rapidly run down towards the end of the Second World War. It was then envisaged that it would be at least 10 years before another major conflict, but the first Soviet Nuclear Test in 1949, and the outbreak of the Korean War one year later, dramatically changed that view.

The then perceived threat was an onslaught of Soviet Tu-4 bombers (exact copies of US B-29 Superfortress-obtained when 4 crash-landed in Siberia in 1945 after a bombing raid on Japan) armed with 20 kt yield atomic bombs. It was doubtful that with the decayed state of the UK's Air Defences that they could of been detected and intercepted. With great haste, the Cherry report of 1949 recommended an urgent overhaul and improvement of the UK's Air Defences, under the codename 'ROTOR'. Due to this, it was recommended that the sprawling network of some 170 radar sites left over from the last war be rationalised and consolidated to 66 sites, and that the best existing radar be completely re-built to higher peacetime standards. The essential elements of the Wartime Control and Reporting structure were maintained - a hierarchical command and control system, separate sectors etc. The contract was given to the Marconi Wireless and Telegraph Company and was (and still is) the largest Government contract awarded to a UK firm.

The project was massive. The re manufactured radar equipment consumed valuable manpower and resources. It must be remembered that the country was under dire economic circumstances at this time, with rationing still in place for many items. But this effort resulted in massive improvements in reliability and

maintainability, as well as performance - some equipment had its range more than doubled.

Research commenced on a new long range Centimetric Early Warning (CEW) radar - code named Green Garlic - later known as Type 80, as a replacement for the Chain Home/Ground Controlled Interception (CH/GCI) radar's. But for the meantime the primary long range warning came from twenty-eight selected rebuilt coastal Chain Home sites; thirty-eight other sites were chosen for a variety of roles - CH Extra Low (CHEL), CEW and GCI, using standardised sets of equipment - Either the Type 7 or 11 GCI sets or the Type 13 and 14 Centimetric sets.

The ROTOR project was divided into two areas - East Coast and West Coast, partly as an economy measure. The threat was seen as higher on the East Coast, so the majority of the sites had underground protected operations rooms; the West Coast had mainly surface bunkers or semi-sunk ones. The distinctive feature of the East Coast sites was the bungalow, which served as access/guardroom to the bunkers. The bungalow concealed an access corridor, which lead to either a 1,2 or 3 (4 for the Sector Operations centres - SOC) level bunker. These were known as R1 for single level bunkers, R2, R3 and the SOC - R4. In construction, a massive hole was first dug, and usually extensive de-watering had to take place. The bunker was then constructed, and buried under earth. The bunkers had 10 foot thick ferro-concrete walls, complete with its own borehole, generators and filtered Air Conditioning. They were supposed to give protection against a near miss by a 20 kt nuclear weapon. The West coast ROTOR sites had similarly massive bunkers, but built on the surface.

At the top of the ROTOR hierarchy, six huge SOC's were also built to provide command and control of the defences. Fighter Command split the UK into six Sectors:

Scottish Sector - SOC at Barnton Quarry
Northern Sector - SOC at Shipton
Eastern Sector - SOC at Bawburgh
Metropolitan Sector- SOC at Kelvedon Hatch
Southern Sector- SOC at Box
Western Sector-SOC at Longley Lane

In addition the radar laid AA guns of the Army got twenty-eight protected AA Operations Rooms (AAOR) in target areas. The whole ROTOR programme consumed 350 000 tons of concrete, 20 000 tons of steel and 1000's of miles of telephone/telex connections. The project started in 1950, with a completion date of 1953. The project progressed well with the usual delays and hiccups: But 2 developments came like a bombshell.

The arrival of the Type 80 in early 1953 changed the whole concept of ROTOR. It was realised that it could provide CEW and GCI functions at one installation. It was also found that on exercises, it was far easier to control the interceptors from the radar site itself. There was simply too long a delay in the transfer of data in the original ROTOR concept.

With the Soviet H-bomb in 1955 and the advent of supersonic, high flying bombers, every second saved in warning and control was vital. A system to designed to counter 400 mph piston engined bombers just could not cope with the new threat. The system of Master Radar Stations (MRS) was conceived. Now warning and control, was handled at one site using one Type 80. The superior range of this radar meant that fewer sites were needed, and although many ROTOR sites became MRS's many more became redundant, including the SOC's and AAOR's. The surplus sites, some less than 2 years old, were cleared and transferred to other Government departments as War HQ's.

Today many ROTOR sites remain, some having going through several different owners/uses, and varying from intact: Kelvedon Hatch, Anstruther - to derelict: Hopton, Trimmingham, Beachy Head. To an explorer the main give-away is the very distinctive bungalow (mainly found on the East Coast Sites), which stands over the entrance to the underground bunker complex. The design of this bungalow has features common to many GPO telephone exchanges of the time. One cannot wonder if they came from the same Ministry of Works drawing office. The circular fanlights and verandas, make for a very attractive building.

Some of the West Coast Sites are completely cleared, with only a few acres of rubble to show what was there. With the rapid post Cold War dismantling and disposal of the Emergency Control Network, many of these once very secret places are now on the market. Let's hope many of them survive. WARNING - Many of the ROTOR bunkers are in a very dilapidated and dangerous state - flooded, with missing floors, and full of asbestos and broken glass, and are very dangerous places to explore. Do not explore without permission of the owner and/or alone.

Book Review -Willesden at War Part 2 by KJ Valentine

This is an excellent book, written by local historian and retired Civil Servant Ken Valentine. It describes the Secret Cabinet War Room built under the GPO Research Establishment at Dollis Hill, known as PADDOCK. This was built as part of the North West London Suburbs Scheme 1936 -1940, which

planned for the evacuation of central government due to severe bombing from Whitehall, to the less vulnerable NW of London. Churchill had a specially requisitioned suite in the private flats "Neville's Court" in Dollis Hill Lane.

Although the Cabinet only met there twice, it was retained until 1944 - partly because of the threat from Hitler's V-Weapons. Similar bunkers were built at Harrow - STATION Z, next to the LMS main line and the Naval Citadel - IP, at Cricklewood. There is evidence that these sites were considered for Cold War use, but were rejected as other solutions became available.

The book is a good read, and explains other plans such as relocation of the Houses of Parliament to Technical Colleges in the Willesden Area. It is available from the author priced £5.25, at:-

KJ Valentine
150 Cairnfield Avenue
London
NW2 7PJ

WB

The Essex Secret Bunker - Furze Hill
The AAOR at Furze Hill, Mistley was built in 1951 for £ 500 000. It controlled a regiment of 3.7" AA guns of the Royal Artillery, that had their wartime deployment sites around the Ports of Harwich, Felixstowe and the Fighter Command Metropolitan SOC site at Trimley Heath (this was before its relocation to the Bunker at Kelvedon Hatch in 1953).

Aircraft plots were fed into the bunker from RAF radar sites at Bawdsey and Great Bromley, as well as the 4 Group ROC Center at Colchester. They were all displayed on a main plotting table, where friendly and enemy tracks were extracted and then individual gun batteries were assigned targets, via radio and telephone links. These batteries all had their own gun laying radar, which used the information given to them from the AAOR to acquire individual targets.

The site at Furze Hill had a small house in which the peacetime staff lived. There were also empty billets for the gunners who would arrive on deployment. The event of new missiles and radars, made the AAOR concept obsolete. The Army left in 1954, and it was in the care of the War Office until 1964, when it was sold to Essex County Council for just £ 5 250!! It was in use right up to 1993 as the County War HQ.

It has now been taken over by the same team that opened Anstruther in Scotland, the Western Approaches War Rooms in Liverpool, and the Dover Castle Complex. It is opening to the public on 5 April 1996 - Good Friday. It is packed with over 80 tons of original Cold War equipment, and is a

fantastic Aladdin's Cave of "goodies". The original plotting board, and gun state control board are on display. The Bunker has been set out as it would have been to control the County - complete with the various communication links and central map area. There will be guided tours, and films showing original Home Office films that would have been shown in the run up to War. There is also an Audio/Visual presentation in the main area.

The bunker will be open from 10:30 - 16:30 all week. For the 1996 season the entrance fees will be:

Adults.....	£4
Senior Citizens.....	£3
Children.....	£2
Family Ticket (Two Adults & upto 3 Children).....	£10

For Full details contact:

Dr James Fox
Crown Buildings
Shrublands Road
Mistley
Essex
CO11 1HS
(01206 392271)

Blue Streak Silos

Recent information has come to light regarding the abandoned British ICBM project of the 50's - *Blue Streak*. This liquid fueled missile was being developed to carry the Deterrent into the 1970's. The recent HMSO book "*RAF Nuclear Deterent Forces*" mentions the plans formulated to deploy the missile in underground silos in the UK and abroad. It was decided that 60 missiles would be deployed in underground pits in areas with rock masses of 300 -500 ft thick, at a cost of £ 2.88 million per site. It was proposed to build a one sixth scale silo at Spadeadam, to launch engineering test models from. In the end, for a variety of reasons *Blue Streak* was cancelled as a military weapon. One of the first operational bases was to have been RAF Duxford in Cambs. Another proposed site was RAF Upavon in Wilts. It is interesting to note, that the silos would have been carved into the solid rock and at a very deep level. At one stage it was proposed that the missiles would be stored fully fueled and armed underground on huge lifting platforms, that would have been raised to the surface for firing.

RSG needs You!

Siren needs your contributions. I am always happy to receive information, cuttings, and articles to put in the Newsletter.

Let me know of any local intelligence on Cold War activities in your area. Many sites are now up for disposal on the open market, and visits may be arranged

Please let me know what you think of RSG and *Siren*. I am always happy to receive feedback, and who knows, I may even persuade you to write an article!

Regards

Tex

Thanks

Thanks to all those who have helped with the concept and production of RSG & *Siren*.